

AUTOMATIC CONTENT ANALYSIS AND REPRESENTATION
OF MULTIMEDIA PRESENTATIONS

ABSTRACT OF THE DISCLOSURE

For use in a multimedia analysis system capable of analyzing the content of multimedia signals, there is disclosed an apparatus and method for creating a multimedia table of contents of videotaped material. In one advantageous embodiment, the apparatus of the present invention comprises a multimedia table of contents controller that is capable of receiving video signals, audio signals, and text signals of said videotaped material, and capable of combining portions of the video signals, audio signals, and text signals to create a table of contents of the videotaped material. The controller is capable of segmenting video signals with both a coarse and fine segmentation application. The controller is also capable of locating boundaries of elements of the videotaped material with both a coarse and fine boundary detection application. An index module of the controller links elements of the table of contents with combinations of audio, visual, and transcript cues. A retrieval module retrieves and displays a table of contents in response to a user request.